

## CLAIMS

What is claimed is:

1. A cutting head assembly for cutting tread rubber for a tire comprises:  
a cutting head having an axis of rotation, a plurality of blade mounting surfaces offset from the axis of rotation;  
a plurality of blades, a blade attached to each of the mounting surfaces and spaced to form a cavity for tread rubber to pass.
2. The cutter head assembly of claim 1 further comprises a high speed motor.
3. The cutter head assembly of claim 1 further comprises a Z axis servo motor for moving the cutting head and blades relative to the tread.
4. The cutter head assembly of claim 1 wherein the cutter head has three mounting surfaces spaced 120° apart and offset from the center a distance X.
5. The cutter head assembly of claim 4 wherein the blades are conical circular shape having a largest diameter cutting edge.
6. The cutter head assembly of claim 4 wherein the distance X is less than 1 inch.
7. The cutter head assembly of claim 6 wherein X is 0.5 inches.
8. The cutter head assembly of claim 5 wherein the blade cutting edge is 0.75 inch in diameter.